

**PERSPECTIVES OF STATE AND
FEDERAL AGENCIES**

D-000296

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State Water Resources Control Board
The Use of Delta Source Water for Drinking Water

The principal water quality issues associated with the use of Delta source water for drinking water purposes are seawater intrusion and elevated concentrations of disinfection byproduct (DBP) precursors.

The State Water Board believes that water from the best available sources should be used to meet the drinking water needs of all Californians. The State Water Board recognizes that water taken from the Delta for municipal and industrial (M&I) uses may not be of the highest quality but the State Water Board did not change water quality objectives between D-1485 (adopted in 1978) and the 1991 Bay/Delta Water Quality Control Plan (1991 Plan). During the Bay/Delta Hearings which culminated in the 1991 Plan, most of the concerns presented to the Board regarding M&I water involved the presence of chemicals which upon routine disinfection forms by-products that are human health concerns. In the Delta the DBP precursors, come from organic carbon in peat soils and from the watershed upstream. During disinfection the formation of DBPs is exacerbated by the presence of bromide. Bromide occurs naturally in the incoming tides ocean water and in agricultural discharges from areas with connate waters, i.e., ancient ocean water found in underground basins.

Presently, treated drinking water from the Delta meets the State and Federal water quality objectives for the principal DBP, trihalomethanes (THM). Concern exists that EPA may develop new objectives which may not be achieved without great cost to municipal users who divert from the Delta. The State Water Board believes that solutions to the DBP concerns do not lie solely with alternative water treatment techniques or relocation of existing intakes. Before costly and unproven steps are taken, there is urgent need for monitoring and research. Also, basic decisions by EPA are needed before objectives can be set to help address the DBP concerns. The State Water Board realizes that while THMs are the DBP of current concern, further studies may indicate that other DBPs are of greater concern.

Due to the concerns with DBPs in treated water from the Delta and in keeping with the goal of obtaining the best available drinking water, the Board found that, whenever feasible, municipal water supply agencies should strive to obtain bromide levels of 0.15 mg/l or less. Appropriate actions by these supply agencies include encouraging the Department of Water Resources and the U.S. Bureau of Reclamation to work with the State Water Board to ensure development of facilities to make maximum use of uncontrolled flows through off-stream storage, encouraging those agencies to move water supply intakes to better locations, working with the State and Regional Boards to eliminate problem discharges within the Delta, and continuing the development of alternative water treatment technologies.